

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW050-0023      **USGS Hydrologic Unit:** 050800030501  
**Stream Name:** Tributary of Salt Creek      **County:** Decatur  
**Description:** CR 150 N      **Latitude:** 39 21 25.42100      **Longitude:** -85 18 57.12500  
**Drainage:**      **Site Number:** 14T-001

**SiteID:** GMW050-0023      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16308  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	142.39 %		ASTM D888-09(C)
DO	14.36 mg/L		ASTM D888-09(C)
pH (Field)	8.75 SU		EPA 150.2
Specific Conductance (Field)	462 umho/cm		SM2510B
Temperature	14.92 °C		SM2550B(2)
Turbidity (Hach)	8.66 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	153 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	203 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	278 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	255 mg/L	10	SM2540C
Sulfate	22 mg/L	5	EPA 375.2
COD	19.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	5.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	149.7 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-05-0006      **USGS Hydrologic Unit:** 050800030502  
**Stream Name:** Salt Creek      **County:** Decatur  
**Description:** CR 50 N      **Latitude:** 39 20 51.70366      **Longitude:** -85 18 22.94456  
**Drainage:**      **Site Number:** 14T-002

**SiteID:** GMW-05-0006      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16309  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Cows d/s of bridge. Smell of manure in the air

Lab ID #:	Result	Reporting Limit	Method
% Sat	145.9 %		ASTM D888-09(C)
DO	14.62 mg/L		ASTM D888-09(C)
pH (Field)	8.52 SU		EPA 150.2
Specific Conductance (Field)	442 umho/cm		SM2510B
Temperature	15.21 °C		SM2550B(2)
Turbidity (Hach)	11.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503523	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	154 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	188 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	264 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	239 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	17.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.3 mg/L	1	SM5310B

Lab ID #: AB16309	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	82 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-05-0014      **USGS Hydrologic Unit:** 050800030502  
**Stream Name:** Righthand Fork Salt Creek      **County:** Decatur  
**Description:** E CR 550 N      **Latitude:** 39 25 20.10720      **Longitude:** -85 19 14.20680  
**Drainage:**      **Site Number:** 14T-003

**SiteID:** GMW-05-0014      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16310  
**Water Flow Type** Pool      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	157.5 %		ASTM D888-09(C)
DO	16.37 mg/L		ASTM D888-09(C)
pH (Field)	8.5 SU		EPA 150.2
Specific Conductance (Field)	585 umho/cm		SM2510B
Temperature	13.58 °C		SM2550B(2)
Turbidity (Hach)	18.7 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503524	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	220 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	305 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	360 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	326 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	15.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.028 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID #: AB16310	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	88.4 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-05-0011      **USGS Hydrologic Unit:** 050800030502  
**Stream Name:** Righthand Fork Salt Creek      **County:** Franklin  
**Description:** Hamburg Rd      **Latitude:** 39 22 54.94878      **Longitude:** -85 17 10.87400  
**Drainage:**      **Site Number:** 14T-004

**SiteID:** GMW-05-0011      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16307  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Fair amount of algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	141.3 %		ASTM D888-09(C)
DO	14.23 mg/L		ASTM D888-09(C)
pH (Field)	9.18 SU		EPA 150.2
Specific Conductance (Field)	332 umho/cm		SM2510B
Temperature	15 °C		SM2550B(2)
Turbidity (Hach)	19.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503525	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	119 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	156 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	205 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	187 mg/L	10	SM2540C
Sulfate	14 mg/L	5	EPA 375.2
COD	20.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.138 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	4.7 mg/L	1	SM5310B

Lab ID #: AB16307	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	11 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC Sky Conditions		WD Wind Direction		WS Wind Strength	
				AT Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-05-0009      **USGS Hydrologic Unit:** 050800030503  
**Stream Name:** Bull Fork      **County:** Franklin  
**Description:** Bullfork Rd      **Latitude:** 39 23 41.04332      **Longitude:** -85 15 12.36757  
**Drainage:**      **Site Number:** 14T-005

**SiteID:** GMW-05-0009      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16306  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	117.6 %		ASTM D888-09(C)
DO	12.11 mg/L		ASTM D888-09(C)
pH (Field)	8.62 SU		EPA 150.2
Specific Conductance (Field)	446 umho/cm		SM2510B
Temperature	13.95 °C		SM2550B(2)
Turbidity (Hach)	2.87 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503527	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	172 mg/L	10	EPA 310.2
Chloride	9.8 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	225 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	262 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	243 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	17.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.015 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.7 mg/L	1	SM5310B

Lab ID #: AB16306	Result	Reporting Limit	Method
Coliforms (Total)	1299.7 MPN/100mL	1	SM9223B
E. coli	81.3 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-05-0007      **USGS Hydrologic Unit:** 050800030502  
**Stream Name:** Salt Creek      **County:** Franklin  
**Description:** Rail Fence Rd      **Latitude:** 39 23 3.70466      **Longitude:** -85 13 6.11403  
**Drainage:**      **Site Number:** 14T-006

**SiteID:** GMW-05-0007      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15966  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Partially ice covered u/s of bridge.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	93.2 %		ASTM D888-09(C)
DO	13.57 mg/L		ASTM D888-09(C)
pH (Field)	7.89 SU		EPA 150.2
Specific Conductance (Field)	553 umho/cm		SM2510B
Temperature	0.07 °C		SM2550B(2)
Turbidity (Hach)	4.46 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	12.7812 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497528	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	212 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	239 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	303 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	281 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	10.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.022 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.8 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-05-0007

Sample Date: 03/17/2014

IDEM Sample #: AB16122

Water Flow Type Riffle

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):  Flow Estimated?  Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	95.3 %		ASTM D888-09(C)
DO	13.43 mg/L		ASTM D888-09(C)
pH (Field)	8.14 SU		EPA 150.2
Specific Conductance (Field)	497 umho/cm		SM2510B
Temperature	1.23 °C		SM2550B(2)
Turbidity (Hach)	5.68 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	29.3846 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 500098	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	183 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	229 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	273 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	257 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	12.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-05-0007

Sample Date: 04/21/2014

IDEM Sample #: AB16300

Water Flow Type Riffle

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):  Flow Estimated?  Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	110.3 %		ASTM D888-09(C)
DO	11.38 mg/L		ASTM D888-09(C)
pH (Field)	8.35 SU		EPA 150.2
Specific Conductance (Field)	412 umho/cm		SM2510B
Temperature	13.91 °C		SM2550B(2)
Turbidity (Hach)	4 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	25.8526 cf/sec		TM D5389-95/D3858
Sky Conditions	2 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503528	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	147 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	183 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	241 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	222 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	16.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	3.4 mg/L	1	SM5310B

Lab ID #: AB16300	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	101.9 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		



# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-05-0012      **USGS Hydrologic Unit:** 050800030505  
**Stream Name:** Harvey Branch      **County:** Franklin  
**Description:** Rail Fence Rd      **Latitude:** 39 23 4.06250      **Longitude:** -85 12 59.52865  
**Drainage:**      **Site Number:** 14T-007

**SiteID:** GMW-05-0012      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16305  
**Water Flow Type** Pool      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	145.2 %		ASTM D888-09(C)
DO	14.97 mg/L		ASTM D888-09(C)
pH (Field)	8.74 SU		EPA 150.2
Specific Conductance (Field)	450 umho/cm		SM2510B
Temperature	13.88 °C		SM2550B(2)
Turbidity (Hach)	7.37 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503529	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	156 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	202 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	265 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	248 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	18.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.021 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.4 mg/L	1	SM5310B

Lab ID #: AB16305	Result	Reporting Limit	Method
Coliforms (Total)	1413.6 MPN/100mL	1	SM9223B
E. coli	27.5 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-05-0015      **USGS Hydrologic Unit:** 050800030504  
**Stream Name:** S Fk Little Salt Cr      **County:** Franklin  
**Description:** Chapel Rd      **Latitude:** 39 27 58.63320      **Longitude:** -85 16 38.64720  
**Drainage:**      **Site Number:** 14T-008

**SiteID:** GMW-05-0015      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16311  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	135.6 %		ASTM D888-09(C)
DO	13.51 mg/L		ASTM D888-09(C)
pH (Field)	8.78 SU		EPA 150.2
Specific Conductance (Field)	529 umho/cm		SM2510B
Temperature	15.5 °C		SM2550B(2)
Turbidity (Hach)	11.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	187 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	260 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	337 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	301 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	17.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	4.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.017 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	344.8 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC Sky Conditions		WD Wind Direction		WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-05-0008      **USGS Hydrologic Unit:** 050800030504  
**Stream Name:** Little Salt Creek      **County:** Franklin  
**Description:** Stipps Hill Rd      **Latitude:** 39 26 14.52460      **Longitude:** -85 11 43.56081  
**Drainage:**      **Site Number:** 14T-009

**SiteID:** GMW-05-0008      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16312  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	124.5 %		ASTM D888-09(C)
DO	12.46 mg/L		ASTM D888-09(C)
pH (Field)	8.5 SU		EPA 150.2
Specific Conductance (Field)	486 umho/cm		SM2510B
Temperature	15.31 °C		SM2550B(2)
Turbidity (Hach)	8.57 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	188 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	240 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	285 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	264 mg/L	10	SM2540C
Sulfate	22 mg/L	5	EPA 375.2
COD	16.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.008 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	488.4 MPN/100mL	1	SM9223B
E. coli	12 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-05-0010      **USGS Hydrologic Unit:** 050800030505  
**Stream Name:** Salt Creek      **County:** Franklin  
**Description:** SR 229      **Latitude:** 39 26 46.54508      **Longitude:** -85 9 1.67470  
**Drainage:**      **Site Number:** 14T-010

**SiteID:** GMW-05-0010      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15969  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Mostly ice covered u/s of bridge.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	90.8 %		ASTM D888-09(C)
DO	13.16 mg/L		ASTM D888-09(C)
pH (Field)	7.85 SU		EPA 150.2
Specific Conductance (Field)	593 umho/cm		SM2510B
Temperature	0.24 °C		SM2550B(2)
Turbidity (Hach)	4.25 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	41.517 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497530	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	244 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	271 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	327 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	302 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.012 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-05-0010      Sample Date: 03/17/2014      IDEM Sample #: AB16125  
 Water Flow Type    Run      Water Appearance    Clear      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:    Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	95.1 %		ASTM D888-09(C)
DO	13.01 mg/L		ASTM D888-09(C)
pH (Field)	8.2 SU		EPA 150.2
Specific Conductance (Field)	520 umho/cm		SM2510B
Temperature	2.35 °C		SM2550B(2)
Turbidity (Hach)	8.31 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	80.0253 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 500100	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	211 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	264 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	297 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	274 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	15.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.02 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-05-0010      Sample Date: 04/21/2014      IDEM Sample #: AB16301  
 Water Flow Type Run      Water Appearance Clear      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments: Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	117.7 %		ASTM D888-09(C)
DO	11.6 mg/L		ASTM D888-09(C)
pH (Field)	8.19 SU		EPA 150.2
Specific Conductance (Field)	466 umho/cm		SM2510B
Temperature	16.02 °C		SM2550B(2)
Turbidity (Hach)	11.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	67.6022 cf/sec		TM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503532	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	177 mg/L	10	EPA 310.2
Chloride	13 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	216 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	6 mg/L	4	SM2540D
Solids, Total (TS)	272 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	249 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	15 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.019 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.7 mg/L	1	SM5310B

Lab ID #: AB16301	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	64.4 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-04-0018      **USGS Hydrologic Unit:** 050800030408  
**Stream Name:** Whitewater River      **County:** Franklin  
**Description:** US 52      **Latitude:** 39 26 58.81830      **Longitude:** -85 8 54.46486  
**Drainage:**      **Site Number:** 14T-011

**SiteID:** GMW-04-0018      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15970  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	98.2 %		ASTM D888-09(C)
DO	13.45 mg/L		ASTM D888-09(C)
pH (Field)	8.2 SU		EPA 150.2
Specific Conductance (Field)	682 umho/cm		SM2510B
Temperature	2.24 °C		SM2550B(2)
Turbidity (Hach)	4.52 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497531	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	290 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	325 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	394 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	365 mg/L	10	SM2540C
Sulfate	34 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.022 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	< 1 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-04-0018      Sample Date: 03/17/2014      IDEM Sample #: AB16126  
 Water Flow Type Run      Water Appearance Clear      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments: Some algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	97.7 %		ASTM D888-09(C)
DO	12.53 mg/L		ASTM D888-09(C)
pH (Field)	8.33 SU		EPA 150.2
Specific Conductance (Field)	645 umho/cm		SM2510B
Temperature	4.78 °C		SM2550B(2)
Turbidity (Hach)	15.5 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation
<b>Lab ID #: 500101</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	266 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	330 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	13 mg/L	4	SM2540D
Solids, Total (TS)	382 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	346 mg/L	10	SM2540C
Sulfate	30 mg/L	5	EPA 375.2
COD	11.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.044 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1 mg/L	1	SM5310B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-04-0018

Sample Date: 04/21/2014

IDEM Sample #: AB16302

Water Flow Type Run

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	112.6 %		ASTM D888-09(C)
DO	11.04 mg/L		ASTM D888-09(C)
pH (Field)	8.36 SU		EPA 150.2
Specific Conductance (Field)	601 umho/cm		SM2510B
Temperature	16.25 °C		SM2550B(2)
Turbidity (Hach)	17.4 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503533	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	237 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	268 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	374 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	337 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	15 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.029 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

Lab ID #: AB16302	Result	Reporting Limit	Method
Coliforms (Total)	365.4 MPN/100mL	1	SM9223B
E. coli	15.5 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27	West (270 Degrees)	3 - Moderate
5 - Mist				4 - Mod./Strong
6 - Fog				5 - Strong
7 - Shower				6 - Gale
				1 - < 32
				2 - 33-45
				3 - 46-60
				4 - 61-75
				5 - 76-85
				6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-06-0019      **USGS Hydrologic Unit:** 050800030603  
**Stream Name:** Duck Creek      **County:** Franklin  
**Description:** US 52      **Latitude:** 39 26 54.31200      **Longitude:** -85 7 58.71360  
**Drainage:**      **Site Number:** 14T-012

**SiteID:** GMW-06-0019      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16303  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	128.9 %		ASTM D888-09(C)
DO	12.61 mg/L		ASTM D888-09(C)
pH (Field)	8.51 SU		EPA 150.2
Specific Conductance (Field)	488 umho/cm		SM2510B
Temperature	16.35 °C		SM2550B(2)
Turbidity (Hach)	9.62 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	199 mg/L	10	EPA 310.2
Chloride	10 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	245 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	288 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	270 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.012 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	547.5 MPN/100mL	1	SM9223B
E. coli	31.8 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist			4 - Mod./Strong	5 - 76-85
6 - Fog			5 - Strong	6 - > 86
7 - Shower			6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-06-0022      **USGS Hydrologic Unit:** 050800030605  
**Stream Name:** Whitewater Canal      **County:** Franklin  
**Description:** Park Ave at Whitewater Canal State Historic      **Latitude:** 39 26 58.77240      **Longitude:** -85 7 10.49160  
**Drainage:**      **Site Number:** 14T-013

**SiteID:** GMW-06-0022      **Sample Date:** 04/21/2014      **IDEM Sample #:** AB16304  
**Water Flow Type** Stagnant      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	77.2 %		ASTM D888-09(C)
DO	6.78 mg/L		ASTM D888-09(C)
pH (Field)	7.98 SU		EPA 150.2
Specific Conductance (Field)	606 umho/cm		SM2510B
Temperature	21.64 °C		SM2550B(2)
Turbidity (Hach)	40.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	200 mg/L	10	EPA 310.2
Chloride	48 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	254 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	29 mg/L	4	SM2540D
Solids, Total (TS)	381 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	340 mg/L	10	SM2540C
Sulfate	17 mg/L	5	EPA 375.2
COD	35.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.23 mg/L	0.03	EPA 365.1
TKN	1.2 mg/L	0.3	EPA 351.2
TOC	7.6 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	1553.1 MPN/100mL	1	SM9223B
E. coli	49.6 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-06-0015      **USGS Hydrologic Unit:** 050800030604  
**Stream Name:** Pipe Creek      **County:** Franklin  
**Description:** Silver Creek Rd      **Latitude:** 39 25 53.45715      **Longitude:** -85 6 38.84657  
**Drainage:**      **Site Number:** 14T-014

**SiteID:** GMW-06-0015      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15971  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Nearly ice covered. No discharge measured.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	% Sat	92.8 %	ASTM D888-09(C)
	DO	13.49 mg/L	ASTM D888-09(C)
	pH (Field)	7.96 SU	EPA 150.2
	Specific Conductance (Field)	603 umho/cm	SM2510B
	Temperature	0.13 °C	SM2550B(2)
	Turbidity (Hach)	3.76 NTU	EPA 180.1
	Air Temp	1 Lookup	Observation
	Sky Conditions	4 Lookup	Observation
	Wind Direction	0 Lookup	Observation
	Wind Strength	1 Lookup	Observation

<u>Lab ID #:</u> 497533	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>	
	Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
	Chloride	23 mg/L	5	SM4500Cl-E
	Hardness (as CaCO3)	259 mg/L	30	EPA 130.1
	Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
	Solids, Total (TS)	333 mg/L	10	SM2540B
	Solids, Total Dissolved (TDS)	310 mg/L	10	SM2540C
	Sulfate	33 mg/L	5	EPA 375.2
	COD	10.5 mg/L	10	SM5220D
	Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
	Nitrogen, Nitrate+Nitrite	1.3 mg/L	0.1	EPA 353.1
	Phosphorus, Total	0.006 mg/L	0.03	EPA 365.1
	TKN	< 0.3 mg/L	0.3	EPA 351.2
	TOC	1.8 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-06-0015

Sample Date: 03/17/2014

IDEM Sample #: AB16127

Water Flow Type Glide

Water Appearance Murky

Water Depth

Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	98.4 %		ASTM D888-09(C)
DO	13.16 mg/L		ASTM D888-09(C)
pH (Field)	8.31 SU		EPA 150.2
Specific Conductance (Field)	508 umho/cm		SM2510B
Temperature	3.24 °C		SM2550B(2)
Turbidity (Hach)	10.7 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Flow	34.5345 cf/sec		ASTM D3858-95
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 500103	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	193 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	247 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	6 mg/L	4	SM2540D
Solids, Total (TS)	288 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	266 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	16 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.034 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-06-0015

Sample Date: 04/22/2014

IDEM Sample #: AB16324

Water Flow Type Pool

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	100.7 %		ASTM D888-09(C)
DO	9.88 mg/L		ASTM D888-09(C)
pH (Field)	8.11 SU		EPA 150.2
Specific Conductance (Field)	450 umho/cm		SM2510B
Temperature	16.25 °C		SM2550B(2)
Turbidity (Hach)	17.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	28.6134 cf/sec		TM D5389-95/D3858
Sky Conditions	2 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503908	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	176 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	188 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	16 mg/L	4	SM2540D
Solids, Total (TS)	269 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	251 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	16.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.041 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	3 mg/L	1	SM5310B

Lab ID #: AB16324	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	30.9 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-06-0013      **USGS Hydrologic Unit:** 050800030602  
**Stream Name:** Clear Fork      **County:** Franklin  
**Description:** Schwegman Rd      **Latitude:** 39 22 20.84904      **Longitude:** -85 8 36.02632  
**Drainage:**      **Site Number:** 14T-015

**SiteID:** GMW-06-0013      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16330  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	109 %		ASTM D888-09(C)
DO	11.03 mg/L		ASTM D888-09(C)
pH (Field)	8.41 SU		EPA 150.2
Specific Conductance (Field)	454 umho/cm		SM2510B
Temperature	14.81 °C		SM2550B(2)
Turbidity (Hach)	3.76 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	174 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	202 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	260 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	253 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	15.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.018 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	53.8 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-06-0020      **USGS Hydrologic Unit:** 050800030604  
**Stream Name:** Pipe Creek      **County:** Franklin  
**Description:** St Marys Rd      **Latitude:** 39 21 6.72840      **Longitude:** -85 6 35.01720  
**Drainage:**      **Site Number:** 14T-016

**SiteID:** GMW-06-0020      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16328  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	106 %		ASTM D888-09(C)
DO	10.53 mg/L		ASTM D888-09(C)
pH (Field)	8.38 SU		EPA 150.2
Specific Conductance (Field)	440 umho/cm		SM2510B
Temperature	15.62 °C		SM2550B(2)
Turbidity (Hach)	4.84 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503910	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	161 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	188 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	251 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	235 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	19.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.019 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3.9 mg/L	1	SM5310B

Lab ID #: AB16328	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	50.4 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-06-0014      **USGS Hydrologic Unit:** 050800030601  
**Stream Name:** Tributary of Pipe Creek      **County:** Ripley  
**Description:** St Marys Rd      **Latitude:** 39 17 56.56584      **Longitude:** -85 6 15.47564  
**Drainage:**      **Site Number:** 14T-017

**SiteID:** GMW-06-0014      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16325  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	% Sat	81.6 %	ASTM D888-09(C)
	DO	8.19 mg/L	ASTM D888-09(C)
	pH (Field)	8 SU	EPA 150.2
	Specific Conductance (Field)	460 umho/cm	SM2510B
	Temperature	15.17 °C	SM2550B(2)
	Turbidity (Hach)	10.6 NTU	EPA 180.1
	Air Temp	4 Lookup	Observation
	Sky Conditions	6 Lookup	Observation
	Wind Direction	0 Lookup	Observation
	Wind Strength	1 Lookup	Observation

<u>Lab ID #:</u> 503911	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	Alkalinity (as CaCO3)	165 mg/L	10 EPA 310.2
	Chloride	26 mg/L	5 SM4500Cl-E
	Hardness (as CaCO3)	189 mg/L	30 EPA 130.1
	Solids, Suspended Total, (TSS)	10 mg/L	4 SM2540D
	Solids, Total (TS)	274 mg/L	10 SM2540B
	Solids, Total Dissolved (TDS)	252 mg/L	10 SM2540C
	Sulfate	22 mg/L	5 EPA 375.2
	COD	18.4 mg/L	10 SM5220D
	Nitrogen, Ammonia	< 0.1 mg/L	0.1 EPA 350.1
	Nitrogen, Nitrate+Nitrite	0.8 mg/L	0.1 EPA 353.1
	Phosphorus, Total	0.035 mg/L	0.03 EPA 365.1
	TKN	0.4 mg/L	0.3 EPA 351.2
	TOC	4 mg/L	1 SM5310B

<u>Lab ID #:</u> AB16325	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	Coliforms (Total)	> 2419.6 MPN/100mL	2419.6 SM9223B
	E. coli	488.4 MPN/100mL	1 SM9223B

<b>Weather Code Definitions</b>					
<b>SC</b>	<b>WD</b>	<b>WS</b>	<b>AT</b>		
<b>Sky Conditions</b>	<b>Wind Direction</b>	<b>Wind Strength</b>	<b>Air Temp</b>		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW060-0027      **USGS Hydrologic Unit:** 050800030601  
**Stream Name:** Pipe Creek      **County:** Ripley  
**Description:** Pipe Creek Rd      **Latitude:** 39 17 44.29900      **Longitude:** -85 5 58.54500  
**Drainage:**      **Site Number:** 14T-018

**SiteID:** GMW060-0027      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16315  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	85.3 %		ASTM D888-09(C)
DO	8.59 mg/L		ASTM D888-09(C)
pH (Field)	7.97 SU		EPA 150.2
Specific Conductance (Field)	388 umho/cm		SM2510B
Temperature	15.03 °C		SM2550B(2)
Turbidity (Hach)	11.9 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503912	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	178 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	196 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	293 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	276 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	15.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	3.8 mg/L	1	SM5310B

Lab ID #: AB16315	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1299.7 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC Sky Conditions		WD Wind Direction		WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-06-0012      **USGS Hydrologic Unit:** 050800030605  
**Stream Name:** Whitewater River      **County:** Franklin  
**Description:** St Marys Rd      **Latitude:** 39 25 15.85784      **Longitude:** -85 0 54.84792  
**Drainage:**      **Site Number:** 14T-019

**SiteID:** GMW-06-0012      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15972  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	99.1 %		ASTM D888-09(C)
DO	13.5 mg/L		ASTM D888-09(C)
pH (Field)	8.22 SU		EPA 150.2
Specific Conductance (Field)	667 umho/cm		SM2510B
Temperature	2.5 °C		SM2550B(2)
Turbidity (Hach)	4.97 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497534	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	284 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	269 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	386 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	358 mg/L	10	SM2540C
Sulfate	33 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.9 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-06-0012      Sample Date: 03/17/2014      IDEM Sample #: AB16128  
 Water Flow Type Run      Water Appearance Murky      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	100 %		ASTM D888-09(C)
DO	12.62 mg/L		ASTM D888-09(C)
pH (Field)	8.34 SU		EPA 150.2
Specific Conductance (Field)	690 umho/cm		SM2510B
Temperature	5.39 °C		SM2550B(2)
Turbidity (Hach)	13.2 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 500104	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	257 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	298 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	10 mg/L	4	SM2540D
Solids, Total (TS)	364 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	332 mg/L	10	SM2540C
Sulfate	30 mg/L	5	EPA 375.2
COD	13.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.038 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.5 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-06-0012

Sample Date: 04/22/2014

IDEM Sample #: AB16329

Water Flow Type Eddy

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	113.6 %		ASTM D888-09(C)
DO	11.1 mg/L		ASTM D888-09(C)
pH (Field)	8.34 SU		EPA 150.2
Specific Conductance (Field)	587 umho/cm		SM2510B
Temperature	16.4 °C		SM2550B(2)
Turbidity (Hach)	9.21 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503913	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	245 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	261 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	9 mg/L	4	SM2540D
Solids, Total (TS)	358 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	325 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	14.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.019 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.8 mg/L	1	SM5310B

Lab ID #: AB16329	Result	Reporting Limit	Method
Coliforms (Total)	727 MPN/100mL	1	SM9223B
E. coli	17.3 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27	West (270 Degrees)	3 - Moderate
5 - Mist				4 - Mod./Strong
6 - Fog				5 - Strong
7 - Shower				6 - Gale
				1 - < 32
				2 - 33-45
				3 - 46-60
				4 - 61-75
				5 - 76-85
				6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-07-0026      **USGS Hydrologic Unit:** 050800030717  
**Stream Name:** East Fork Whitewater River      **County:** Franklin  
**Description:** US 52      **Latitude:** 39 24 44.54104      **Longitude:** -85 0 39.39133  
**Drainage:**      **Site Number:** 14T-020

**SiteID:** GMW-07-0026      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15973  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	115.7 %		ASTM D888-09(C)
DO	15.73 mg/L		ASTM D888-09(C)
pH (Field)	8.35 SU		EPA 150.2
Specific Conductance (Field)	627 umho/cm		SM2510B
Temperature	2.86 °C		SM2550B(2)
Turbidity (Hach)	9.8 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497535	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	231 mg/L	10	EPA 310.2
Chloride	36 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	263 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	363 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	324 mg/L	10	SM2540C
Sulfate	31 mg/L	5	EPA 375.2
COD	12.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.04 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-07-0026

Sample Date: 03/17/2014

IDEM Sample #: AB16129

Water Flow Type Run

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	128.1 %		ASTM D888-09(C)
DO	16.61 mg/L		ASTM D888-09(C)
pH (Field)	8.65 SU		EPA 150.2
Specific Conductance (Field)	480 umho/cm		SM2510B
Temperature	4.41 °C		SM2550B(2)
Turbidity (Hach)	9.98 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation
<b>Lab ID #: 500105</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	169 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	205 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	268 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	249 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	20.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.086 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.7 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-07-0026

Sample Date: 04/22/2014

IDEM Sample #: AB16323

Water Flow Type Run

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):  Flow Estimated?  Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	175.7 %		ASTM D888-09(C)
DO	19.7 mg/L		ASTM D888-09(C)
pH (Field)	8.99 SU		EPA 150.2
Specific Conductance (Field)	460 umho/cm		SM2510B
Temperature	10.22 °C		SM2550B(2)
Turbidity (Hach)	8.58 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503914	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	166 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	199 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	277 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	259 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	14.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.057 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID #: AB16323	Result	Reporting Limit	Method
Coliforms (Total)	307.6 MPN/100mL	1	SM9223B
E. coli	1 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27	West (270 Degrees)	3 - Moderate
5 - Mist				4 - Mod./Strong
6 - Fog				5 - Strong
7 - Shower				6 - Gale
				1 - < 32
				2 - 33-45
				3 - 46-60
				4 - 61-75
				5 - 76-85
				6 - > 86



# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-08-0026      **USGS Hydrologic Unit:** 050800030802  
**Stream Name:** Wolf Creek      **County:** Franklin  
**Description:** Blue Creek Rd      **Latitude:** 39 23 55.37091      **Longitude:** -85 1 5.20564  
**Drainage:**      **Site Number:** 14T-021

**SiteID:** GMW-08-0026      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16332  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	124.3 %		ASTM D888-09(C)
DO	11.25 mg/L		ASTM D888-09(C)
pH (Field)	8.48 SU		EPA 150.2
Specific Conductance (Field)	454 umho/cm		SM2510B
Temperature	20.12 °C		SM2550B(2)
Turbidity (Hach)	5.42 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503916	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	171 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	199 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	273 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	257 mg/L	10	SM2540C
Sulfate	37 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.01 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID #: AB16332	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	12.2 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW080-0003      **USGS Hydrologic Unit:** 050800030802  
**Stream Name:** Blue Creek      **County:** Franklin  
**Description:** Highland Center Rd      **Latitude:** 39 23 45.00000      **Longitude:** -85 0 55.00000  
**Drainage:** 32.6      **Site Number:** 14T-022

**SiteID:** GMW080-0003      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15974  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Partially ice covered u/s and d/s of bridge.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	97.4 %		ASTM D888-09(C)
DO	14.03 mg/L		ASTM D888-09(C)
pH (Field)	8.07 SU		EPA 150.2
Specific Conductance (Field)	612 umho/cm		SM2510B
Temperature	0.39 °C		SM2550B(2)
Turbidity (Hach)	2.38 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	7.2041 cf/sec		TM D5389-95/D3858
Sky Conditions	8 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 497536	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	238 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	270 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	6 mg/L	4	SM2540D
Solids, Total (TS)	339 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	286 mg/L	10	SM2540C
Sulfate	38 mg/L	5	EPA 375.2
COD	10.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.009 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.2 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW080-0003

Sample Date: 03/17/2014

IDEM Sample #: AB16130

Water Flow Type Pool

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments: Fish observed

Lab ID #:	Result	Reporting Limit	Method
% Sat	112 %		ASTM D888-09(C)
DO	14.37 mg/L		ASTM D888-09(C)
pH (Field)	8.19 SU		EPA 150.2
Specific Conductance (Field)	637 umho/cm		SM2510B
Temperature	4.74 °C		SM2550B(2)
Turbidity (Hach)	7.81 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Flow	17.4725 cf/sec		TM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 500106	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	200 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	235 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	304 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	286 mg/L	10	SM2540C
Sulfate	33 mg/L	5	EPA 375.2
COD	15.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.028 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW080-0003

Sample Date: 04/22/2014

IDEM Sample #: AB16327

Water Flow Type Pool

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):  Flow Estimated?  Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	131.4 %		ASTM D888-09(C)
DO	12.29 mg/L		ASTM D888-09(C)
pH (Field)	8.22 SU		EPA 150.2
Specific Conductance (Field)	484 umho/cm		SM2510B
Temperature	18.52 °C		SM2550B(2)
Turbidity (Hach)	5.14 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	13.6448 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 503918	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	186 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	203 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	293 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	273 mg/L	10	SM2540C
Sulfate	35 mg/L	5	EPA 375.2
COD	13.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID #: AB16327	Result	Reporting Limit	Method
Coliforms (Total)	547.5 MPN/100mL	1	SM9223B
E. coli	29.5 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0014      **USGS Hydrologic Unit:** 050800030802  
**Stream Name:** Blue Creek      **County:** Franklin  
**Description:** Blue Creek Rd      **Latitude:** 39 21 25.92724      **Longitude:** -85 2 6.60695  
**Drainage:**      **Site Number:** 14T-023

**SiteID:** GMW-08-0014      **Sample Date:** 02/17/2014      **IDEM Sample #:** AB15975  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Mostly ice covered. Flow not measured.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	94.3 %		ASTM D888-09(C)
DO	13.73 mg/L		ASTM D888-09(C)
pH (Field)	8.15 SU		EPA 150.2
Specific Conductance (Field)	612 umho/cm		SM2510B
Temperature	0.09 °C		SM2550B(2)
Turbidity (Hach)	2 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	7 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 497537	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	236 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	262 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	343 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	320 mg/L	10	SM2540C
Sulfate	39 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.018 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.5 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0014

Sample Date: 03/17/2014

IDEM Sample #: AB16131

Water Flow Type Riffle

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	111.7 %		ASTM D888-09(C)
DO	14.26 mg/L		ASTM D888-09(C)
pH (Field)	8.65 SU		EPA 150.2
Specific Conductance (Field)	505 umho/cm		SM2510B
Temperature	4.94 °C		SM2550B(2)
Turbidity (Hach)	8.25 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Flow	9.6578 cf/sec		TM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 500107	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	185 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	220 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	296 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	281 mg/L	10	SM2540C
Sulfate	32 mg/L	5	EPA 375.2
COD	15.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.029 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0014

Sample Date: 04/22/2014

IDEM Sample #: AB16322

Water Flow Type Riffle

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	135.7 %		ASTM D888-09(C)
DO	12.33 mg/L		ASTM D888-09(C)
pH (Field)	8.8 SU		EPA 150.2
Specific Conductance (Field)	441 umho/cm		SM2510B
Temperature	19.99 °C		SM2550B(2)
Turbidity (Hach)	6.04 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	8.4882 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503919	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	165 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	210 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	267 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	251 mg/L	10	SM2540C
Sulfate	33 mg/L	5	EPA 375.2
COD	14.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.015 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID #: AB16322	Result	Reporting Limit	Method
Coliforms (Total)	613.1 MPN/100mL	1	SM9223B
E. coli	27.9 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0022      **USGS Hydrologic Unit:** 050800030801  
**Stream Name:** East Fork Blue Creek      **County:** Franklin  
**Description:** Blue Creek Rd      **Latitude:** 39 20 41.77852      **Longitude:** -85 1 53.88210  
**Drainage:**      **Site Number:** 14T-024

**SiteID:** GMW-08-0022      **Sample Date:** 04/22/2014      **IDEM Sample #:** AB16334  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	142.2 %		ASTM D888-09(C)
DO	13.23 mg/L		ASTM D888-09(C)
pH (Field)	8.79 SU		EPA 150.2
Specific Conductance (Field)	448 umho/cm		SM2510B
Temperature	18.75 °C		SM2550B(2)
Turbidity (Hach)	5.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	161 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	206 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	276 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	261 mg/L	10	SM2540C
Sulfate	35 mg/L	5	EPA 375.2
COD	18.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.019 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	15.6 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0015      **USGS Hydrologic Unit:** 050800030804  
**Stream Name:** Whitewater River      **County:** Franklin  
**Description:** SR 1      **Latitude:** 39 21 33.76751      **Longitude:** -84 57 16.95374  
**Drainage:**      **Site Number:** 14T-025

**SiteID:** GMW-08-0015      **Sample Date:** 02/18/2014      **IDEM Sample #:** AB15976  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	92.6 %		ASTM D888-09(C)
DO	12.85 mg/L		ASTM D888-09(C)
pH (Field)	8.2 SU		EPA 150.2
Specific Conductance (Field)	641 umho/cm		SM2510B
Temperature	1.77 °C		SM2550B(2)
Turbidity (Hach)	8.84 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 497538	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	261 mg/L	10	EPA 310.2
Chloride	28 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	287 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	377 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	345 mg/L	10	SM2540C
Sulfate	33 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.027 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0015

Sample Date: 03/18/2014

IDEM Sample #: AB16132

Water Flow Type Run

Water Appearance Murky

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	91.9 %		ASTM D888-09(C)
DO	11.89 mg/L		ASTM D888-09(C)
pH (Field)	8.3 SU		EPA 150.2
Specific Conductance (Field)	575 umho/cm		SM2510B
Temperature	4.44 °C		SM2550B(2)
Turbidity (Hach)	12.5 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation
<b>Lab ID #: 500108</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	231 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	266 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	338 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	307 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	14.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.054 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0015

Sample Date: 04/23/2014

IDEM Sample #: AB16321

Water Flow Type Run

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	89.7 %		ASTM D888-09(C)
DO	9.51 mg/L		ASTM D888-09(C)
pH (Field)	8.31 SU		EPA 150.2
Specific Conductance (Field)	566 umho/cm		SM2510B
Temperature	12.6 °C		SM2550B(2)
Turbidity (Hach)	7.95 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503921	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	232 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	251 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	358 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	331 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.036 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID #: AB16321	Result	Reporting Limit	Method
Coliforms (Total)	920.8 MPN/100mL	1	SM9223B
E. coli	57.2 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27	West (270 Degrees)	3 - Moderate
5 - Mist				4 - Mod./Strong
6 - Fog				5 - Strong
7 - Shower				6 - Gale
				1 - < 32
				2 - 33-45
				3 - 46-60
				4 - 61-75
				5 - 76-85
				6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0016      **USGS Hydrologic Unit:** 050800030803  
**Stream Name:** Big Cedar Creek      **County:** Franklin  
**Description:** US 52      **Latitude:** 39 21 27.80481      **Longitude:** -84 56 26.33933  
**Drainage:**      **Site Number:** 14T-026

**SiteID:** GMW-08-0016      **Sample Date:** 02/18/2014      **IDEM Sample #:** AB15967  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Mostly ice coverd. No flow measured.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	94.9 %		ASTM D888-09(C)
DO	13.82 mg/L		ASTM D888-09(C)
pH (Field)	8.21 SU		EPA 150.2
Specific Conductance (Field)	624 umho/cm		SM2510B
Temperature	0.04 °C		SM2550B(2)
Turbidity (Hach)	19.9 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 497539	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	254 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	286 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	9 mg/L	4	SM2540D
Solids, Total (TS)	377 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	342 mg/L	10	SM2540C
Sulfate	37 mg/L	5	EPA 375.2
COD	12.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.033 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	1.8 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0016      Sample Date: 03/18/2014      IDEM Sample #: AB16123  
 Water Flow Type Riffle      Water Appearance Clear      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	98.4 %		ASTM D888-09(C)
DO	13.57 mg/L		ASTM D888-09(C)
pH (Field)	8.44 SU		EPA 150.2
Specific Conductance (Field)	620 umho/cm		SM2510B
Temperature	1.99 °C		SM2550B(2)
Turbidity (Hach)	4 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Flow	19.641 cf/sec		TM D5389-95/D3858
Sky Conditions	2 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 500109	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	248 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	307 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	353 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	325 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	12.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.02 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.4 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0016

Sample Date: 04/23/2014

IDEM Sample #: AB16320

Water Flow Type Riffle

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):  Flow Estimated?  Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	102.9 %		ASTM D888-09(C)
DO	11.66 mg/L		ASTM D888-09(C)
pH (Field)	8.42 SU		EPA 150.2
Specific Conductance (Field)	531 umho/cm		SM2510B
Temperature	9.8 °C		SM2550B(2)
Turbidity (Hach)	3.68 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Flow	14.5457 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503922	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	214 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	268 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	333 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	308 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	12 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.012 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID #: AB16320	Result	Reporting Limit	Method
Coliforms (Total)	866.4 MPN/100mL	1	SM9223B
E. coli	93.6 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist			4 - Mod./Strong	5 - 76-85	
6 - Fog			5 - Strong	6 - > 86	
7 - Shower			6 - Gale		

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-08-0024      **USGS Hydrologic Unit:** 050800030803  
**Stream Name:** Big Cedar Creek      **County:** Franklin  
**Description:** Big Cedar Rd      **Latitude:** 39 25 13.21578      **Longitude:** -84 54 24.67967  
**Drainage:**      **Site Number:** 14T-027

**SiteID:** GMW-08-0024      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16333  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	110.4 %		ASTM D888-09(C)
DO	12.37 mg/L		ASTM D888-09(C)
pH (Field)	8.56 SU		EPA 150.2
Specific Conductance (Field)	534 umho/cm		SM2510B
Temperature	10.21 °C		SM2550B(2)
Turbidity (Hach)	4.44 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	209 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	269 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	329 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	303 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	12.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	5.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.013 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	225.4 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0019      **USGS Hydrologic Unit:** 050800030806  
**Stream Name:** Logan Creek      **County:** Dearborn  
**Description:** SR 46      **Latitude:** 39 16 38.48942      **Longitude:** -84 52 58.09151  
**Drainage:**      **Site Number:** 14T-028

**SiteID:** GMW-08-0019      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16318  
**Water Flow Type** Stagnant      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	87.8 %		ASTM D888-09(C)
DO	8.95 mg/L		ASTM D888-09(C)
pH (Field)	8.19 SU		EPA 150.2
Specific Conductance (Field)	645 umho/cm		SM2510B
Temperature	14.65 °C		SM2550B(2)
Turbidity (Hach)	15.2 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503924	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	227 mg/L	10	EPA 310.2
Chloride	29 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	292 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	11 mg/L	4	SM2540D
Solids, Total (TS)	428 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	391 mg/L	10	SM2540C
Sulfate	66 mg/L	5	EPA 375.2
COD	17.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.054 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.5 mg/L	1	SM5310B

Lab ID #: AB16318	Result	Reporting Limit	Method
Coliforms (Total)	613.1 MPN/100mL	1	SM9223B
E. coli	126.1 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	



# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-08-0030      **USGS Hydrologic Unit:** 050800030805  
**Stream Name:** Whitewater River      **County:** Franklin  
**Description:** St Peters Rd      **Latitude:** 39 18 52.04520      **Longitude:** -84 54 20.31480  
**Drainage:**      **Site Number:** 14T-029

**SiteID:** GMW-08-0030      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16326  
**Water Flow Type** Eddy      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

Lab ID #:	Result	Reporting Limit	Method
% Sat	98.9 %		ASTM D888-09(C)
DO	10.42 mg/L		ASTM D888-09(C)
pH (Field)	8.38 SU		EPA 150.2
Specific Conductance (Field)	562 umho/cm		SM2510B
Temperature	12.98 °C		SM2550B(2)
Turbidity (Hach)	8.09 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	231 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	273 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	348 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	314 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	12.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.021 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	1.8 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	770.1 MPN/100mL	1	SM9223B
E. coli	63.1 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60	
4 - Cloudy		3 - Moderate	4 - 61-75	
5 - Mist		4 - Mod./Strong	5 - 76-85	
6 - Fog		5 - Strong	6 - > 86	
7 - Shower		6 - Gale		

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0018      **USGS Hydrologic Unit:** 050800030806  
**Stream Name:** Johnson Fork      **County:** Dearborn  
**Description:** Johnson Fork Rd      **Latitude:** 39 17 16.19872      **Longitude:** -84 50 24.95531  
**Drainage:**      **Site Number:** 14T-030

**SiteID:** GMW-08-0018      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16319  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Might go dry later in summer

Lab ID #:	Result	Reporting Limit	Method
% Sat	128.9 %		ASTM D888-09(C)
DO	13.22 mg/L		ASTM D888-09(C)
pH (Field)	8.52 SU		EPA 150.2
Specific Conductance (Field)	570 umho/cm		SM2510B
Temperature	14.19 °C		SM2550B(2)
Turbidity (Hach)	4.45 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 503926	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	213 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	270 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	347 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	325 mg/L	10	SM2540C
Sulfate	55 mg/L	5	EPA 375.2
COD	19.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.013 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

Lab ID #: AB16319	Result	Reporting Limit	Method
Coliforms (Total)	378.4 MPN/100mL	1	SM9223B
E. coli	66.3 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0021      **USGS Hydrologic Unit:** 050800030810  
**Stream Name:** Whitewater River      **County:** Dearborn  
**Description:** Jamison Rd      **Latitude:** 39 14 57.51189      **Longitude:** -84 49 15.29368  
**Drainage:**      **Site Number:** 14T-031

**SiteID:** GMW-08-0021      **Sample Date:** 02/18/2014      **IDEM Sample #:** AB15968  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	97.4 %		ASTM D888-09(C)
DO	13.38 mg/L		ASTM D888-09(C)
pH (Field)	8.23 SU		EPA 150.2
Specific Conductance (Field)	648 umho/cm		SM2510B
Temperature	2.17 °C		SM2550B(2)
Turbidity (Hach)	10.5 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 497540	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	256 mg/L	10	EPA 310.2
Chloride	30 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	302 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	381 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	347 mg/L	10	SM2540C
Sulfate	35 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.028 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.3 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0021

Sample Date: 03/18/2014

IDEM Sample #: AB16124

Water Flow Type Run

Water Appearance Murky

Water Depth

Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	94.6 %		ASTM D888-09(C)
DO	12.1 mg/L		ASTM D888-09(C)
pH (Field)	8.37 SU		EPA 150.2
Specific Conductance (Field)	582 umho/cm		SM2510B
Temperature	4.85 °C		SM2550B(2)
Turbidity (Hach)	13.7 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation
<b>Lab ID #: 500110</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	232 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	296 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	339 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	309 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	10.3 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.051 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: GMW-08-0021

Sample Date: 04/23/2014

IDEM Sample #: AB16316

Water Flow Type Run

Water Appearance Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	109.7 %		ASTM D888-09(C)
DO	11.07 mg/L		ASTM D888-09(C)
pH (Field)	8.41 SU		EPA 150.2
Specific Conductance (Field)	567 umho/cm		SM2510B
Temperature	14.85 °C		SM2550B(2)
Turbidity (Hach)	7.98 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 503927	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	231 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	252 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	7 mg/L	4	SM2540D
Solids, Total (TS)	347 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	318 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	10.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.034 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

Lab ID #: AB16316	Result	Reporting Limit	Method
Coliforms (Total)	436 MPN/100mL	1	SM9223B
E. coli	61.8 MPN/100mL	1	SM9223B

Weather Code Definitions				
SC	WD	WS	AT	
Sky Conditions	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0 North (0 Degrees)	1 - < 32	
2 - Scattered	9 - Snow	9 East (90 Degrees)	2 - 33-45	
3 - Partly	10 - Sleet	18 South (180 Degrees)	3 - 46-60	
4 - Cloudy		27 West (270 Degrees)	4 - 61-75	
5 - Mist			5 - 76-85	
6 - Fog			6 - > 86	
7 - Shower				

# Indiana Department of Environmental Management

## Office of Water Quality-Watershed Assessment and Planning Branch

### Surface Water Results Summary

**SiteID:** GMW-08-0027      **USGS Hydrologic Unit:** 050800030808  
**Stream Name:** Sours Run      **County:** Franklin  
**Description:** Drewersburg Rd      **Latitude:** 39 22 43.93458      **Longitude:** -84 50 12.39149  
**Drainage:**      **Site Number:** 14T-032

**SiteID:** GMW-08-0027      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16331  
**Water Flow Type** Run      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:** Algae on rocks

Lab ID #:	Result	Reporting Limit	Method
% Sat	114.8 %		ASTM D888-09(C)
DO	12.6 mg/L		ASTM D888-09(C)
pH (Field)	8.31 SU		EPA 150.2
Specific Conductance (Field)	580 umho/cm		SM2510B
Temperature	11.11 °C		SM2550B(2)
Turbidity (Hach)	7.96 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #:	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	250 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	295 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	359 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	335 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	18.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.03 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.7 mg/L	1	SM5310B

Lab ID #:	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	285.1 MPN/100mL	1	SM9223B

Weather Code Definitions					
SC	WD	WS	AT		
Sky Conditions	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** GMW-08-0020      **USGS Hydrologic Unit:** 050800030807  
**Stream Name:** Dry Fork Whitewater River      **County:** Franklin  
**Description:** Dickson Rd      **Latitude:** 39 23 33.28802      **Longitude:** -84 49 16.68112  
**Drainage:**      **Site Number:** 14T-033

**SiteID:** GMW-08-0020      **Sample Date:** 04/23/2014      **IDEM Sample #:** AB16317  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	% Sat	109.5 %	ASTM D888-09(C)
	DO	12.23 mg/L	ASTM D888-09(C)
	pH (Field)	8.54 SU	EPA 150.2
	Specific Conductance (Field)	538 umho/cm	SM2510B
	Temperature	10.42 °C	SM2550B(2)
	Turbidity (Hach)	5.34 NTU	EPA 180.1
	Air Temp	4 Lookup	Observation
	Sky Conditions	1 Lookup	Observation
	Wind Direction	0 Lookup	Observation
	Wind Strength	0 Lookup	Observation

<u>Lab ID #:</u> 503929	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	Alkalinity (as CaCO3)	203 mg/L	10 EPA 310.2
	Chloride	20 mg/L	5 SM4500Cl-E
	Hardness (as CaCO3)	257 mg/L	30 EPA 130.1
	Solids, Suspended Total, (TSS)	5 mg/L	4 SM2540D
	Solids, Total (TS)	334 mg/L	10 SM2540B
	Solids, Total Dissolved (TDS)	317 mg/L	10 SM2540C
	Sulfate	22 mg/L	5 EPA 375.2
	COD	13.3 mg/L	10 SM5220D
	Nitrogen, Ammonia	< 0.1 mg/L	0.1 EPA 350.1
	Nitrogen, Nitrate+Nitrite	5.7 mg/L	0.1 EPA 353.1
	Phosphorus, Total	0.017 mg/L	0.03 EPA 365.1
	TKN	0.4 mg/L	0.3 EPA 351.2
	TOC	2.4 mg/L	1 SM5310B

<u>Lab ID #:</u> AB16317	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
	Coliforms (Total)	> 2419.6 MPN/100mL	2419.6 SM9223B
	E. coli	547.5 MPN/100mL	1 SM9223B

<b>Weather Code Definitions</b>					
<b>SC</b>	<b>WD</b>	<b>WS</b>	<b>AT</b>		
<b>Sky Conditions</b>	<b>Wind Direction</b>	<b>Wind Strength</b>	<b>Air Temp</b>		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	